U.S. Application No. 10/549,241

Docket No.: 12279-424-999

Response to Office Action dated December 8, 2008

Filed June 3, 2009

## **Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

## **Listing of Claims:**

1-71. (Canceled)

72. (Currently Amended) A method of inducing proliferation of lymphoid lineage progenitor cells or progeny thereof, comprising contacting the lymphoid lineage progenitor cells or progeny thereof with Bv8, EG-VEGF, or a combination of Bv8 and EG-VEGF to induce proliferation of said cells, wherein said Bv8 comprises at least 80% 90% amino acid identity with SEQ ID NO:4 and wherein said EG-VEGF comprises at least 90% amino acid identity with SEQ ID NO:8 or amino acids 20-105 of SEQ ID NO:8.

73. (Canceled)

74. (Previously Presented) The method of claim 72, wherein said progeny are lymphoid precursor cells or lymphocytes.

75. (Previously Presented) The method of claim 74, wherein said progeny are T cells.

76. (Previously Presented) The method of claim 75, wherein the T cells are CD4+ T cells.

77. (Canceled)

78. (Currently Amended) The method of claim 72, wherein the Bv8 comprises an the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:6.

79. (Previously Presented) The method of claim 72, wherein the Bv8 is a native human Bv8 polypeptide.

80. (Previously Presented) The method of claim 72, wherein the Bv8 binds heparin.

81. (Previously Presented) The method of claim 72, wherein the Bv8 comprises a fusion polypeptide, a chimeric polypeptide, or an immunoadhesin.

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82. (Canceled)

83. (Previously Presented) The method of claim 72, wherein the EG-VEGF is a native

human EG-VEGF polypeptide.

84. (Previously Presented) The method of claim 72, wherein the EG-VEGF comprises

SEQ ID NO:10 or amino acid residues 20-105 of SEQ ID NO:8.

85. (Previously Presented) The method of claim 72, wherein the EG-VEGF comprises a

fusion polypeptide, a chimeric polypeptide, or an immunoadhesin.

86-101. (Canceled)

102. (Withdrawn) A method for treating an autoimmune disorder or a disorder associated

with abnormal hematopoiesis in a mammal, comprising administering to said mammal a Bv8

antagonist, EG-VEGF antagonist, or combination thereof.

103. (Withdrawn) The method of claim 102, wherein the disorder is a hematological

disorder.

104. (Withdrawn) The method of claim 103, wherein the hematological disorder is

leukemia, myeloproliferative disorder, myelodysplastic disorder, lymphoproliferative

disorder, or lymphodysplastic disorder.

105. (Withdrawn) The method of claim 104, wherein the leukemia is acute myeloid

leukemia, chronic myelogenous leukemia, or acute lymphoblastic leukemia.

106. (Withdrawn) The method of claim 102, wherein the autoimmune disorder comprises

inflammatory bowel disease, Crohn's disease, colitis, graft versus host disease, lupus,

multiple sclerosis, myasthenia gravis, optic neuritis, psoriasis, rheumatoid arthritis, Graves

Disease, autoimmune hepatitis, type I diabetes, or aplastic anemia.

07. (Withdrawn) The method of claim 102, wherein said Bv8 comprises an amino acid

sequence having at least 80% identity with an amino acid sequence of SEQ ID NO:2 or SEQ

ID NO:4 and induces proliferation of endothelial cells.

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108. (Withdrawn) The method of claim 107, wherein the Bv8 comprises an amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:6.

109. (Withdrawn) The method of claim 107, wherein the Bv8 is a native human Bv8 polypeptide.

110. (Withdrawn) The method of claim 107, wherein the Bv8 binds heparin.

111. (Withdrawn) The method of claim 107, wherein the Bv8 comprises a fusion polypeptide, a chimeric polypeptide, or an immunoadhesin.

112. (Withdrawn) The method of claim 102, wherein the EG-VEGF comprises an amino acid sequence having at least 80% identity with amino acids 20-105 of SEQ ID NO: 8 and induces proliferation of endothelial cells.

113. (Withdrawn) The method of claim 112, wherein the EG-VEGF is a native human EG-VEGF polypeptide.

114. (Withdrawn) The method of claim 112, wherein the EG-VEGF comprises SEQ ID NO:10 or amino acid residues 20-105 of SEQ ID NO:8.

115. (Withdrawn) The method of claim 112, wherein the EG-VEGF comprises a fusion polypeptide, a chimeric polypeptide, or an immunoadhesin.

116. (Withdrawn) The method of claim 102, wherein the antagonist is an antibody or fragment thereof, small molecule, soluble receptor, or oligonucleotide.

117. (Withdrawn) The method of claim 116, wherein the antibody is polyclonal or monoclonal.

118. (Withdrawn) The method of claim 116, wherein the antibody is humanized or chimeric.

119. (Withdrawn) The method of claim 116, wherein the antibody is a Fab, Fab', F(ab')<sub>2</sub>, or Fv fragment.

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- 120. (Withdrawn) The method of claim 116, wherein the soluble receptor is Bv8/EG-VEGF receptor-1 or Bv8/EG-VEGF receptor-2.
- 121. (Withdrawn) An article of manufacture comprising:

a container:

a Bv8 antagonist, EG-VEGF antagonist, or combination thereof; and instructions for using the Bv8 antagonist, EG-VEGF antagonist, or combination thereof to treat hematological disorders.

- 122. (Canceled)
- 123. (Currently Amended) A method of increasing the population of T lymphocytes in a subject, comprising administering Bv8, EG-VEGF, or a combination of Bv8 and EG-VEGF to a subject following treatment of the subject with an immunosuppressive agent, radiation, or chemotherapy, wherein said Bv8 comprises at least 80% amino acid identity with SEQ ID NO:2 or SEQ ID NO:4 and induces the production of T lymphocytes and wherein said EG-VEGF comprises at least 90% amino acid identity with SEQ ID NO:8 or amino acids 20-105 of SEQ ID NO: 8 and induces the production of T lymphocytes.
- 124. (Previously Presented) The method of claim 123, wherein the T lymphocytes are CD4+ T cells.
- 125. (Previously Presented) The method of claim 123, wherein the chemotherapy comprises treatment with 5 fluorouracil, vincristine, cisplatin, oxoplatin, methotrexate, 3'-azido-3'-deoxythymidine, paclitaxel, doxetaxel, an anthracycline antibiotic, or mixtures thereof.
- 126. (Currently Amended) A method of increasing the population of white blood cells in a subject, comprising administering Bv8 or a combination of Bv8 and EG-VEGF to a subject following treatment of the subject with an immunosuppressive agent, radiation, or chemotherapy, wherein said Bv8 comprises at least 80% 90% amino acid identity with SEQ ID NO:2 or SEQ ID NO:4 and induces the production of white blood cells and wherein said EG-VEGF comprises at least 90% amino acid identity with SEQ ID NO: 8 or amino acids 20-105 of SEQ ID NO:8 and induces the production of white blood cells.

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127. (Previously Presented) The method of claim 126, wherein the white blood cells comprise neutrophils or B cells.

128. (Previously Presented) The method of claim 126, wherein the chemotherapy comprises treatment with 5 fluorouracil, vincristine, cisplatin, oxoplatin, methotrexate, 3'azido-3'-deoxythymidine, paclitaxel, doxetaxel, an anthracycline antibiotic, or mixtures thereof.